REMARKS

CLAIMS

Claims 39-53 and 67-74 are currently pending in the application. Applicant amends claims 39, 47 and 67 in hopes of expediting prosecution of the application. In the Non-Final Office Action of February 24, 2006, the Examiner rejected pending claims 39-53 and 67-74 on various grounds. The rejections to claims 39-53 and 67-74 are traversed. Applicant responds to the anticipation rejection as subsequently recited herein, and respectfully request reconsideration and further examination of the present application under 37 C.F.R. §1.112. Applicant incorporates by reference the arguments submitted on October 25, 2005 in the Response and Amendment After Final.

A. Applicant traverses the Examiner's 35 U.S.C. § 102(e) rejection of pending claims 39-53 and 67-74 as being anticipated by Whitcher et al. (U.S. Pub. No. US 2003/0018381).

The pending application is directed towards a method of manufacturing an endoluminal stent. More specifically, the claimed method (as recited in independent claims 39 and 47 of the Application) requires, *inter alia*, the step of vacuum depositing a stent-forming metal onto a substrate under process conditions selected to minimize (or substantially eliminate) formation of chemical and intra- and inter-granular precipitates in the bulk material of the as deposited crystalline film. Support for this amendment is found at Page 11, line 30 to Page 12, line 4, Page 13, lines 6-9 and Page 14, lines 19-21 of the specification as originally filed.

In the Non-Final Office Action of February 24, 2006, the Examiner argued:

> Whitcher discloses controlling the microcrystal [0011, 0028, 0038, 0042, 0043], therefore, inherently the granular precipitates are controlled, since granular precipitates are an element of a materials [sic] microstructure. Further, inherently the precipitates are controlled, because Whitcher discloses selection of a process *condition*. Whitcher discloses selection of a temperature, pressure, and rate during deposition, therefore, inherently the precipitates are being controlled, since amount and size of the granular precipitates is dependent upon temp, pressure, and rate, and upon selection of these elements, one has controlled the crystal structure outcome of the metal, hence the precipitates.

Applicant respectfully disagrees with the Examiner's interpretation of U.S. Pub. No. US 2003/0018381 (hereinafter referred to as "Whitcher"). While Applicant acknowledges that *Whitcher* does disclose controlling the microstructure of a deposited thin film, contrary to the Examiner's assertion, *Whitcher* does not disclose minimizing formation of precipitates in the as-deposited crystalline film. As readily recognized by those skilled in the art, the suggestion in *Whitcher* of controlling the microstructure of a deposited film is different from Applicant's disclosure of minimizing precipitate formation under process conditions specifically selected to minimize formation of intra- and inter-granular precipitates in the bulk material of the deposited film.

From Applicant's meticulous reading of *Whitcher*, Applicant has failed to come across any mention of inter- and intra-granular precipitates, let alone a reference to the specific idea of minimizing inter- and intra-granular precipitates in a deposited film. If the Examiner disagrees, Applicant kindly welcomes the Examiner to specifically point out where in *Whitcher* she sees a reference to the concept of controlling or minimizing inter- and intra-granular precipitates in a deposited film. While Paragraph 0028 of *Whitcher* does recite the desirability of controlling the composition, thickness, surface roughness and microstructure of a deposited film, to form medical devices with desired compositions, mechanical properties and geometries, it is nonetheless readily recognized by those skilled in the art that the above-described controlled microstructure does not encompass inter- and intra-granular precipitates. As commonly understood in by those skilled in the metallurgy art, a deposited film's microstructure is a distinctive entity from inter- and intra-granular precipitates formed on a film after post-deposition heat annealing of the film.

In fact, the process disclosed in *Whitcher* exemplifies a conventional vacuum deposition process as known in the vacuum deposition art. In the conventional prior art vacuum deposition process, a material (e.g., nitinol) is vacuum deposited as a thin metal film in an amorphous state onto a substrate. Because the deposited film is in an amorphous state (i.e., non-crystalline state), an annealing step (synonymous to aging process) is required to crystallize the thin film. Through an annealing process, precipitates inevitably form and are driven out of the solid solution. *Whitcher* discloses a

method for vacuum depositing a metal film wherein an annealing process is required. *See* Paragraph 64. Accordingly, *Whitcher's* method of forming a thin metal film through vacuum deposition does not teach minimizing precipitates because that method requires an annealing step that will inevitably form precipitates.

In contrast to the conventional vacuum deposition process described in *Whitcher*, the claimed method eliminates the need for an annealing step. The claimed method achieves this by providing means for vacuum depositing a thin film that is in crystalline form as deposited. As a result, an annealing step is not required, and no precipitates are thereby formed. Thus, Applicant teaches a method for minimizing precipitate formation that is distinguished from and not taught by *Whitcher*. Accordingly, Applicant kindly requests that the Examiner's anticipation rejection based on *Whitcher* be withdrawn.

B. Applicant traverses the Examiner's 35 U.S.C. § 102(e) rejection of pending claims 39-40, 42, 46-53, 67-68, 70 and 74 as being anticipated by Johnson et al. (U.S. Pat. No. US 6,533,905).

According to the Examiner, U.S. Pat. No. US 6,533,905 (hereinafter referred to as "*Johnson*") teaches a vacuum deposition process "wherein the deposition is under process conditions selected to minimize the formation of chemical inter and intra-granular precipitates in the bulk." Applicant respectfully disagrees and kindly requests the Examiner to specifically point out where in *Johnson* she sees a reference to the concept of minimizing inter- and intra-granular precipitates in a deposited film.

In fact, *Johnson* actually teaches away from what the Examiner claims it teaches. On column 5 lines 48-53, *Johnson* describes:

> When a desired film thickness is reached, the sputter deposition step is terminated, and the thin-film expanse on the mandrel is then annealed under heating/cooling conditions to achieve desired shape-memory alloy properties in the device. The annealing step may be by thermal heating or by exposure to an infrared heater in vacuum.

As described previously in Section A of this Response, it is widely known in the art that a post-deposition annealing step is employed to change a material from its amorphous state to a crystalline state, by driving precipitates out of the amorphous solid solution to form the inter- and intra-granular precipitates which give the annealed crystalline material its

desired shape memory properties. Thus, from the above passage in *Johnson*, it is abundantly clear to those skilled in the art that *Johnson* teaches the desirability and necessity of forming precipitates. This teaching is diametrically opposed to Applicant's teaching of controlling and minimizing precipitate formation in an as-deposited crystalline metal film. Accordingly, Applicant submits that the claimed method is distinguished from *Johnson* and kindly requests that the anticipation rejection be withdrawn.

EXAMINER INTERVIEW SUMMARY

Applicant express thanks to the Examiner for her graciousness in taking the time to meet with the undersigned on August 14, 2006 to discuss the pending application. During the interview, the undersigned presented the very arguments set forth in this Response. The Examiner proposed an amendment to claim 39 and an analogous one to claim 67 to further clarify the claimed invention. The interview concluded with the Examiner agreeing to undertake a close review of Applicants' Response to the Office Action.

Summary

The Examiner's rejections of claims 39-53 and 67-74 have been obviated by the above remarks. Accordingly, Applicants submit that the pending claims are patentably distinct from and over the art cited and of record. Favorable reconsideration of the rejection of the pending claims is solicited.

Any amendments made during the prosecution of this application are intended solely to expedite prosecution of the application and are not to be interpreted as acknowledgement of the validity of any rejection raised earlier in prosecution, nor as acknowledgement that any citation made against the application is material to the patentability of the application prior to amendment.

This Paper is being concurrently filed with an Amendment Transmittal, which includes a fee calculation sheet and any applicable requests for Extension of Time. Other than those stated in the Amendment Transmittal, no additional fees are believed necessitated by the filing of this Paper. Should any such additional fees be required, the Director is hereby authorized to deduct them from Deposit Account NO. 18-2000, of which the undersigned is an authorized signatory.

Should the Examiner believe that there are any outstanding matters capable of resolution by a telephone interview, the Examiner is encouraged to telephone the undersigned attorney of record.

Respectfully submitted

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